

25

July 14, 1988

MEMORANDUM TO: Mr. C. S. Barlow
Mr. L. S. Briney
Dr. J. H. Chang
Mr. N. L. Dawley
Ms. J. A. Rothman
Mr. P. Swigert

SUBJECT: Founding Member Qualitative Feedback

REFERENCE: (1) T. C. Papes' Memorandum of July 11th
(2) D. L. Sullivan's Memorandum of July 7th

Please review Dave Sullivan's attached report on Founding Member Feedback and prepare a specific list of items that Systems Development can put in place to address the members comments. Please have this to me by July 22nd.


J. H. Beall

JHB:js
Attachments (2)

A:7148801.032

Prodigy Confidential

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Membership
17/1/89

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July 11, 1988

MEMORANDUM TO: Mr. J. H. Beall
Mr. H. Heilbrunn
Mr. H. E. Smith

SUBJECT: Founding Member Qualitative Feedback
June 1988

REFERENCE: D. L. Sullivan's Report 7/7/88


This report puts the microscope on our fundamental problems, and it would be healthy for us to accept it as our performance report card at the present time.

I would like each of you to analyze the report for the specific weaknesses that apply to your area, responding to each one with your viewpoint and corrective action. I would like that response documented back to me and copied to the others.

The overriding urgent problems are speed and shopping inadequacy. Close behind are such items as poor performance by the experts, criticism of graphics, and schetchiness of editorial content.

We have to bring our best efforts to bear on these problems to avoid negativism in the marketplace.

Please jump on these aggressively.


T. C. Papes, Jr.

/jm

cc: Mr. R. S. Glatzer

cc: [unclear]

July 7, 1988

MEMORANDUM TO: Distribution

SUBJECT: Founding Member Qualitative Feedback
June, 1988

On June 15 and June 16 the first Founding Member qualitative groups met with Judith Langer of Langer Associates, Inc. in Atlanta and Hartford. A total of 39 Founding members participated in the four discussion groups. A total of 26 Prodigy Services Company personnel observed the groups.

The purpose of the four groups was to help clarify the key questions identified through the May Founding Member phone survey. This phone survey included a representative sample of the 759 Founding Members enrolled by May 4 and having at least (1) one hour of usage from the date of enrollment.

Selection criteria for the four qualitative groups:
(1) participant in the May Founding Member phone survey, (2) total usage (from date of enrollment to June 6) of 2+ hours, and (3) living in the Hartford or Atlanta area.

The main issues discussed were speed and its perception, local content desires, reaction to commercial mail and overall acceptance of version 6.0.

The attached report from Langer (E047) summarizes the four groups.

Additional copies of this report can be requested by calling extension 8732.

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D. L. Sullivan

DLS/dm
Attachment

a:0707801.026

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DISTRIBUTION

Mr. J. H. Beall

Mr. R. S. Glatzer

Mr. H. Heilbrunn

Mr. J. M. Hewitt

Mr. T. C. Papes

Mr. H. C. Perce

Mr. G. M. Perry

Mr. J. M. Pugliese

Mr. R. M. Shapiro

Mr. H. E. Smith

A SUMMARY REPORT
ON
FOUNDING MEMBERS FOCUS GROUPS

PREPARED FOR:
PRODIGY SERVICES COMPANY

Study #61205-797
July, 1988

E047

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	DISCUSSION	3
IV.	SUMMARY AND IMPLICATIONS	39

I. INTRODUCTION

The PRODIGY Services Company placed its videotex services with Founding Members several months ago in Hartford and Atlanta. Most of these members, who were invited to use the Service free during a test period, are people involved in the computer business; the majority are not employees of PRODIGY Service partners.

A telephone survey was conducted in the month of May among the Founding Members concerning overall reactions to the Service as well as to specific issues. The company decided to conduct qualitative research among these Founding Members in order to gain a clearer understanding of their reactions, in particular to the issue of the system's speed. A series of four focus groups was conducted with members, two in each market of Atlanta and Hartford; respondents were all selected on the basis of having given the Service less than top ratings for speed.

The discussions covered overall reaction to the Service, detailed reactions to its speed, feelings about local coverage, depth, shopping, Membership Services, and commercial mail. At the end of the Hartford sessions,

respondents spoke directly to staff members of the PRODIGY Service and saw a demonstration on a computer.

The focus groups were conducted June 15 and 16, 1988.

It should be kept in mind that the hypotheses discussed here are based on semi-structured research among a small number of respondents.

II. DISCUSSION

Overall reactions to the PRODIGY Service were somewhat more positive than those seen in previous research but, nevertheless, were still fairly critical in tone. Several respondents did say that they enjoyed the Service, finding it interesting and useful -- "unique," "informative." Others, however, felt that the speed and lack of depth prevented them from liking the Service. It is important to stress that these are the major difficulties seen in previous research as well. Navigational problems still appear to be serious in some areas but the research suggests that the Service may have improved in this respect. Even the Members who were critical of the Service currently seemed to feel it has potential in the future as changes are made and transactional features are added.

Initially, Members were excited about the Service but this interest soon faded, according to a number of respondents. The novelty of the Service and curiosity about it stimulated a good deal of this involvement in the beginning. While it is to be expected that some of this feeling would diminish, several Members indicated that the frustrations with the

Service -- primarily in the area of speed -- quickly dampened their interest.

Several areas of content were liked by some of the Founding Members; some of these areas currently have some limitations, according to respondents but, nevertheless, appear to be strengths for the Service. The contents mentioned most often were the following:

- Stock market information. This information is important and useful to a number of users who are investors. As we have seen in previous research, however, this segment repeatedly asks for more depth and other improvements to make the information more valuable: the ability to print out is critical for future reference and this should include the date; historical information for filing, not just closing figures; graphs would enhance the information; more exchanges and more mutual funds. It seems that the people who will be interested in stock market information need it to be far more comprehensive than it currently is. Desire for such data is so strong, we believe, that this segment would buy the PRODIGY

*Dew Jones
enhancements*

Service for the stock market reports alone if they were enhanced.

- Weather. This feature is both useful and, it seems, fun. Members are interested in local weather as well as travellers' information. Here, too, there were requests for improvement: the information is sometimes not up-to-date enough (it should not be more than one hour old, a respondent said); in Atlanta, respondents were not interested in seeing the entire Southeast down to Florida, but wanted to see the state of Georgia or the seven metropolitan counties (not just the city); some wanted more detail, such as wind speeds, which is shown on newspaper and tv weather maps.

*Redesign
Shopping*

- Shopping. While not a strength currently, shopping initially attracted a number of respondents. There is still the hope that it will be improved because, members feel, it could be a major attraction. (This will be discussed later in detail.)

- Experts. A few of the respondents were very interested in the "Ask the Experts" feature of the

Service. They were pleased with the answers they had received which were helpful and informative. "This Old House," "Victory Garden," in particular received praise for specific and quick responses to inquiries; some positive comments were also made about Fonda, Parker, and Boyd. One Hartford woman who used this service often said that it offers the opportunity to "have conversations" with people one wouldn't ordinarily be able to -- such as Alsop, Boyd, and Siskel. She found this interaction "fun" and "informative." (The other respondents did not seem to see the potential for enjoyment, rather than pure information, in this service.)

On the negative side, several respondents who sent a message to experts expressed disappointment. The responses, some felt, had been quite slow. Worse, they were unsatisfactory in several cases: on a question about taxes and IRA's, one Member had been told to consult a government official or tax advisor rather than being given a specific answer; Alsop did not know the answer to a question about large screen tv; the "soap opera lady" had made some vague reply that everyone hopes the writers' strike will be over

soon, rather than saying how long it is anticipated to last. Some responses were criticized for lack of depth; Alsop provided only a "fluffy" response, and Boyd was too brief.

One respondent who owns an Encyclopedia Britannica had messaged a question for convenience's sake which was answered in two days, a period he felt was too long. He suggested that it would be better if the Service would "just tell me where to find" the answer in his copy, giving him the "research tools" to use on his own.

The daily columns by experts were considered not particularly useful because they are so short, nowhere near the length of a newspaper column. A respondent commented, "I refuse to believe that Howard Cossell can write a one-sentence article."

- The contest. Several Members said they turn the system on in order to see if they have won the contest.

- Other content. There were scattered comments about other aspects of the Service respondents liked, including: PC News, Hello Hartford, teenager information (which a father, not his children, uses), "Where is Carmen Sandiego." One respondent said the CEO game sounds as if it will be fun.

On the problem side, the issue of the PRODIGY Service's uniqueness in content was raised. One Member asked what the Service "can offer me" that isn't currently available through newspapers, magazines and other media. Weather maps, horoscopes, electronic banking, messaging, and electronic bulletin boards are all obtainable through other sources, he said.

More specifically, a Member who had looked at the Art Gallery described it as "a waste."

The speed issue was probed in depth in these groups. Although they had all been screened as Members who found the Service less than totally satisfactory on this basis, a few respondents said they could accept the speed as it is. One man also commented that his wife, who is not a "power user" as he is, liked the system and would find it confusing if it

2400
Modem
Special deals
for upgraders

were faster. The general view was that these Members, most of whom either worked in the computer field or used computers daily in their work, are more demanding in this area as power users than the average person. (Whether or not people less sophisticated about computers would, in fact, find the speed acceptable cannot, of course, be seen from this research.)

To most of these respondents, it must be stressed, speed is a, if not the, central problem with the Service today. The system was described in several groups as "painfully" slow; because of its speed, respondents said it is "boring" and not "fun," causing them to lose a good deal of the initial enthusiasm they had. It is also a major reason why other family members (wives, children) are not interested in becoming involved with the Service. The speed problem is interrelated with the depth issue, which will be discussed further below. Several reasons for Members' impatience with the Service's speed emerged in this research:

- The system is seen as very slow compared to computer systems the Members use at work. It is also far slower, they said, than other videotex services which several use, specifically CompuServe and the Source. Bulletin boards, which a number also use, are

increase
size of stage
CD
Reduced
graphics
to Q & A
to eliminate
redundant
painting

considerably faster as well. The Members are accustomed to obtaining much more information more quickly. It is difficult, therefore, for these computer users to slow themselves down when they use the PRODIGY Service. A few respondents said that, in all fairness, other videotex services charge a lot more and that the bulletin boards have fewer people on line at any given time. In a sense, however, this was considered irrelevant because it does not alleviate the frustration most feel when they use the Service.

- The Service shows far less text per page than other computer systems. Repeatedly, respondents suggested that the Service use a 80 x 20 screen which can display more text than a 40 character screen. A major reason why there is less text, respondents said, is the use of graphics and the advertisements. While some accepted the idea that the PRODIGY Service has ads so that users can receive the system at low rates, there was still a high level of annoyance with the fact that the graphics mode characters are so large, restricting the number of words which can be shown. As an example, a respondent complained that seeing

only four stocks per screen is "bad"; it takes too long to see the desired number.

- The graphics are seen as a main reason for the system's slowness. ("I'd rather have screens and screens of information than pretty graphics.") Not only do they take a good deal of room on the screen, sharply reducing the amount of text, but the graphics are slow to come up. A number of Members complained that they have to wait as graphics are painted on the screen. As in previous research, several respondents suggested that there be an option to go into text mode, eliminating graphics where Members are not interested in having them. Even the Members who enjoyed the graphics and who were willing to tolerate some degree of slowness for them, felt that there needs to be a reduction in waiting time.
- The "working" icon is a particular annoyance. Respondents complained about seeing it so often and having to wait for it to stop flashing. It is especially irritating, they said, that they cannot type ahead, that the system does not have a buffer. Again, this is a feature they are accustomed to having

on other computer systems; not only do they miss it a great deal, they do not understand why the Service cannot offer it.

- The system makes it very difficult to go exactly to where the user wants to be. It is not understood, for instance, that it is possible to jump from topic to topic; going through the buildings is extremely slow; too much time is spent going through screens. It was suggested that a list of words or, in effect, a table of contents be shown (for example, at the beginning of local news) from which users can select those specific items they want to see. Another request, made by several respondents was the ability to scroll through an area rather than having to page down.

- Logging on and logging off are considered quite slow with several unnecessary steps. This is particularly important, we believe, since, of course, these procedures must be done each time the Service is used; from the first moment, users are irritated. Several respondents said they saw no need to have to enter their PRODIGY ID and password every time. Logging on,

auto login

several respondents said, should be a one-button procedure, including calling up one's Viewpath. Currently, it takes three to five minutes (according to a respondent who said he had timed the Service) between turning the system on and getting any information; this is simply too long, especially in the morning when it is easy enough to pick up a newspaper.

Logging off, after a slow session, is the "final irritation" a respondent said, because it too requires going through several screens.

- The Service is also seen slow as compared to other media, print and broadcast. If one is reading the newspaper, for instance, it is possible to move ahead at one's own pace; the result is that a great deal more information can be obtained in the same period of time. One respondent said that in five minutes he could get as much information from the Wall St. Journal as he does from a half hour on the Service, a "big time differential." Another respondent commented, sarcastically, that the Service makes her want to read a newspaper, meaning that her impatience

with its slowness makes a newspaper look more inviting.

This problem, we hypothesize, might come up with users less familiar with computers as well.

- A session on the PRODIGY Service is longer than it should be, several respondents said. They expect to get the information they are seeking in about half an hour, a few said (one mentioned 15 minutes), rather than the hour or so now required. The Service, some commented, was supposed to be designed for "busy people" but it is not possible to use it quickly.

In one group, a respondent mentioned having read in the newsletter that the Service plans to add windows which, he hoped, might increase the speed.

Respondents were asked if they would be willing to accept the current speed of the system in exchange for certain improvements. Consistently, the answer was no; the speed now is tolerable at best to most of the Members studied.

In general, then, the Service is perceived as very slow because users find they often have to wait for it or, put another way, that they are ahead of it. They are ready to read more, ready to enter their next command but, instead, they simply have to sit and wait. If the user decides to see an ad, this means waiting to see it, then waiting to get back, and so on. It is not possible to download files, a feature users want, but instead one has to be at the computer working and waiting. There is "lots of idle time" which users feel is simply wasted; as people who consider themselves very busy, they resent this.

Feelings about the graphics were mixed. Some of the Founding Members thought that the graphics are an appealing part of the Service, a feature which makes it "more attractive" and differentiates it from other videotex services such as CompuServe, which are unrelieved text.

At the opposite extreme, some of the respondents would prefer to have graphics in only a few selected areas where they serve a clear-cut purpose. The choice to switch off graphics and use a plain text mode, as mentioned earlier, was suggested here as in previous studies.

Looking more specifically at reactions to the graphics, there were positive comments about the weather maps, some of the ads, the contest, and certain logos (such as Neiman-Marcus).

On the negative side, graphics -- both design borders and pictures -- are seen as taking too much room on the screen, severely restricting the amount of text which can be shown. Some respondents felt the graphics do not contribute much to the Service, in part because of what one called their "gratuitous use." They are clearly necessary for areas such as games, but should be used in news, he felt, only when they make the story clearer. The quality of the graphics also came in for some criticism as "too cutesy" and not detailed enough to be useful. The graphics mode typeface not only uses too much space, but can be difficult to read. This suggests that both the amount and type of graphics may need some improvement.

There were a number of complaints that the Service "lacks depth" in most areas. It is "superficial everywhere," one respondent stated. In news, only a headline is offered rather than a full story; while some respondents did not seem to expect or need more than this, because they rely on other media, others found it frustrating. The Service's news is

more "abbreviated than tv." The story on House Speaker Wright, for instance, should provide background information about him, and there should be more information about candidates, some respondents suggested. A respondent also expressed surprise that the Service was not up-to-date in providing news about IBM, one of the partners; computer publications have discussed a new system which the Service has not even mentioned.

In shopping, discussed below, there is not enough variety. The experts, both in their "columns" and in their response to Service users, tend to be far too brief. The games are too "simple," showing only four lines of words at a time, and requiring waiting for graphics. The weather, generally one of the strongest features, could use more detail for some users. The stock market needs far more data to please some users. The soap opera digests, according to one woman, are too brief. The book listings should have descriptions and possibly ratings as well. Sports, of strong interest to some men, needs more details on box scores, a story on each game, and "real columns, not just cutesy sayings."

In Consumer Reports, Members had expected that entire reports would be available, and were very disappointed that only

partial ones on selected subjects were offered. The articles are also incomplete, leaving out important parts such as the frequency of repairs. Because of the system's inability to print out, it is necessary to copy down the information which is highly annoying and is seen as defeating one of the major purposes of a computer. (One respondent called these reports "astoundingly bad," saying, "there is nothing there.") Consumer Reports has come up consistently in the qualitative research as a feature users expected to be valuable and would even be willing to pay for, a measure of its importance. It is seen as a highly useful reference, which users would find far more convenient to have on the Service than having to search through back issues.

What is needed -- and what seems to have been expected -- is for the PRODIGY Service to have a data base, according to some respondents. (This has been mentioned in other research as well.) Then the user can access whatever information is desired. Data base services, a respondent said, allow the user to choose among three levels of information which she would like to see on the PRODIGY Service: title, abstract, and full article. Related to this, respondents wanted to see a word search capability that would make it easier to get through information. While such capabilities might raise the

price of the Service and the Members seem realistic enough to recognize that this Service is intended to have a fairly low price, the problem remains that users do not seem to feel it currently offers them enough information in an easily accessible way.

The depth problem consists of both the amount of information provided and the process of obtaining it. Members feel it is frustrating to be given only one or two sentences on a screen and then to have to enter "Next" to see more, which is, again, only one or two sentences. Even when they have finished reading an entire section, they feel the information in many cases is brief and skimpy. One respondent also commented that "the depth is there, but it requires a lot of digging" to find it, going through a number of screens and pursuing a number of different paths. The time and effort involved in getting a relatively small amount of information does not seem worthwhile, some feel. As this viewpoint would suggest, the speed and depth issues are interrelated. Asked how they would like greater depth to be provided, respondents said they want more information per screen, as mentioned before, along with more screens per item where it is useful.

On the positive side, one Hartford respondent commended the Service for its election coverage. Other respondents in the session did not seem to be aware of this feature, however.

In addition to the problem with speed, several other frustrations with the working of the system came out in the sessions. A number of respondents were highly annoyed that they have been bumped off the Service; some even said this happens the majority of times. The problem particularly arises when the Service is being updated. This requires that they re-boot the system, another step which is seen as unnecessarily time-consuming.

Beyond any specific complaints about navigation and operation, some Members, most of whom are highly experienced with computers, found it irritating that there is no tree available to show them around the PRODIGY Service system. They become lost going from branch to branch without understanding how to get back to where they want to be. One Member commented that he "would like to drop bread crumbs" in order to mark his route.

In terms of specific difficulties using and getting around the system, respondents mentioned the following:

- Finder*
- There is no word search capability which makes it difficult, if not impossible, to find certain information. One example which came up several times is in the messaging area: a number of Members would like to find the names of other people living nearby with whom they could correspond and to look up people they know, but they cannot do this. There appears to be strong interest in the messaging capability, as we have seen before, which is underutilized presently because of such problems. If word search were available, it would be possible to have a medical encyclopedia, one user said, and to look up specific symptoms, a very valuable service; another use would be to look up books on a subject.

- The system requires more keystrokes than users think should be needed, one of the reasons for its slowness. For example, it should not be necessary to hit Enter each time; one keystroke should be sufficient, respondents said.

- It should be possible to cursor down through the material rather than having to type in another command.
- There are a number of inconsistencies in the system, making it confusing and frustrating. One Member said he had counted five different sets of rules.
- No easy way exists to go directly to the item the user wishes to see rather than going step by step, screen by screen. If there are ten news stories and a user wants to see five, he has to go to each one, a respondent said; instead, it should be possible to "scan" the ten and go immediately to the story of interest, just as one does with a newspaper.
- Other problems arise in the messaging area in addition to those mentioned above: the inability to print out names of other members of the PRODIGY Service severely limits the use of this feature; some respondents had tried repeatedly to sign up for the list without success (one said he attempted to do so for three weeks); messages in the mailbox are shown only the first time. Messages to the Service itself are not

numbered, which makes it difficult for the user to know which of his/her messages MSS is answering.

- The Working icon, discussed in the section on speed above, is also considered inconsistent. Users are not sure when it is done and are unable to anticipate it.
- The Undo key can undo the whole system, according to some respondents. One Member talked about being "afraid" to use it.
- The Directory has been significantly improved, providing all the names of experts, for example, but it is still "in eighteen pieces," one respondent stated.
- The Zip function is very confusing and unpredictable, often not doing what it is intended to do. Instead, users find themselves somewhere they didn't plan to be and unable to get back to where they were. ("Zip is more like zap.")
- If the user chooses to look at an ad, it is also very hard to go back to the screen he/she was reading. As

a result, respondents said they have become reluctant to look at ads -- which, they recognize, defeats some of the purpose of the Service.

It is important to note that no complaints surfaced concerning installation of the system. The only remark made was a positive one, that it had been easy.

Only a few comments were made about the manual, a subject which was not probed in this research. One respondent said it was good, another that it was written for kindergarten.

Most of the respondents were highly critical of shopping on the Service as it presently functions. They felt that this has the potential to be very useful -- convenient, easy, time-saving, maybe even fun. There are too many problems now to make it of value, however; it is just as, if not more, convenient to order by conventional means than through the Service. It was pointed out that shopping through the Service was easier than trying to reach a store like Sears by phone and constantly getting busy signals, and that it saves money on stamps for mail orders, but these conveniences did not seem particularly important to most respondents.

Specific problems mentioned were the following:

- Prices are too high. The Service, several respondents said, "offers no bargains"; everything is full retail, "list price" instead of "street price." This particularly seems to be noticeable and annoying in computer software, where a number of Members are accustomed to finding discounts; the same vendors, some said, offer lower prices in their stores than on the Service. CompuServe, one respondent said, has a 30-day guarantee to match any lower price the user finds, except on computer products. Sales, specials and discounts ("coupons") for members who mention the Service would provide an incentive to use the shopping function.

One Member commented that he would be willing to pay a little more than regular outlets if he felt the Service offered him convenience, but right now it does not. Most of the respondents, however, seemed to be highly concerned about the price issue.

This and previous qualitative research, then, strongly suggests that pricing is a major obstacle to shopping on the Service.

- Too few products are shown. Each vendor only has a handful of products available, respondents said, which falls way below expectations. JC Penney, one Member commented, had not added anything new since he had joined the Service several months ago; the lack of newness, it can be hypothesized, does not give users motivation to find out what is happening on the Service.

Members had anticipated having complete catalogs on line, particularly in the case of Sears which is a PRODIGY Service partner. In the case of Florsheim's, too, a number of men thought they could simply look up the style number of the shoes they buy regularly and order it through the Service; they were surprised and highly disappointed that only a few styles (usually not the one they buy) are offered. Not only is the variety very limited, but Members felt they can do better by going into a store or ordering through a catalog.

- The Service does not eliminate the need for a catalog. Users who wish to order from Sears are still required to go and get their own catalog -- assuming they have one, which some do not. For those who do have a catalog, it would be useful for the Service to indicate what page number the item is on, so they can see a photograph and read more information. This point strongly detracts from the Service's convenience since Members expected to be able to shop totally on line. It also raises the question in some Members' minds as to what benefit the Service has.

The fact that there is a charge to order catalogs also made some Members highly annoyed.

- The number of vendors is limited, a point brought up by a few respondents. One remarked that the vendors now are the same as those at the beginning, a few months ago. As the comment indicates, Members seem to expect far more variety and expansion in the Service.
- The graphics are not adequate for ordering in some cases. Florsheim's was mentioned here as a particularly notable example: how can anybody order a

pair of shoes just from a rough sketch? The graphics on the Service, while colorful and sometimes useful, are seen as being of little help in the shopping area: they are not detailed enough, the color is not good enough (most of the respondents do not receive the Service in full color), and the resolution is not clear enough ("a stick figure is no incentive"). Interestingly, however, respondents did not complain of the fact that there are some items offered without any graphics (such as from the Wooden Spoon, a vendor some of the men might not have used).

- Not enough information is provided. Catalogs offer far more descriptive detail ("the specs") than the PRODIGY Service does. A sentence or two, a respondent said, is adequate only for an "impulse buyer." This man suggested that if catalogs were sent to users, they could then shop through the Service; in effect, this means that the catalogs would complement the Service which would be used for ordering rather than information.
- Delivery is slow. Several respondents who had ordered through the Service complained that it took too long

to receive the products. It would be faster simply to go to a store or to phone in an order. Another complaint about delivery from one of the women is that an order of pantyhose arrived looking "like junk mail" with no letter enclosed, so she did not even realize at first it was what she had requested.

- The hours of the shopping service are restricted.

This point was brought up by some respondents who had tried to use Sears late in the evening; when they found it was not available, they made the assumption that this would be true of other vendors as well. (No information was provided to indicate otherwise; this reaction demonstrates the fact that users often make quick judgments.) In this respect, too, Members' expectations were disappointed since they thought part of the convenience of shopping through the Service would be 24-hour availability, which they are used to with catalog orders.

- The ordering process has problems. Here, too, there are a number of screens which must be gone through-- five or six just to see the price, seven to nine to place an order. It is not possible just to type in

the size and color desired. Afterwards, there is no printed copy of the order which may be needed if problems arise. (This, again, shows the importance of hard copies for users.)

Several ideas were suggested for the shopping service, in addition to the ones mentioned above. Some respondents wanted to have credit card numbers kept on file rather than requiring the user to enter them each time. Reactions to this suggestion were quite divided: some respondents liked the convenience, but others were worried about security (one stated that the credit card should "reside in my machine," giving the user a choice as to whether or not to allow the Service access). It may be worthwhile considering giving users an option here.

Other suggestions were:

- On-line flower ordering, an idea which came up in a previous group.
- Giving Members an opportunity to provide feedback to vendors, an extension of the Service's messaging capabilities.

- Providing the name of a local vendor so the user can "touch and feel" an item. This idea is probably only feasible for manufacturers, not for vendors; it shows the users' feelings that ordering through the Service at present is not satisfactory.

All in all, then, the Founding Members felt that the shopping currently lacks convenience, variety or price savings. Another problem is that some of the men reported that their wives, whom they would have assumed would like the shopping capabilities, have not been interested in using the PRODIGY Service, primarily because they are uncomfortable with computers. A major market target, therefore, may not be reached. The research also suggests that incentives, such as special discounts for users or sales, may be needed to stimulate more usage of the shopping service.

- Despite these current limitations, a number of respondents spontaneously mentioned that they look forward to grocery shopping being added to the Service. Potentially, this could be a great convenience in reducing time and effort spent on a fairly irritating chore. (While grocery shopping by phone is offered by some stores, this would be an area where the Service would have little, if any, competition; in other

areas of shopping, direct phone/mail orders are considered highly convenient today.) At the same time, respondents raised a number of questions about whether or not this feature will work effectively: will the prices be competitive with the stores, just adding a moderate delivery charge; how can the Service, which offers so few items now, provide the whole range of items available in a supermarket; will perishable items be delivered quickly enough; how can users make their selections without seeing the actual products, particularly produce, meat, and expiration dates on the perishable items.

There is also interest in banking and airline reservations, transactional services Members have heard will be added in the future. These will contribute to the Service's usefulness, Members feel.

"Local content" seems to have a number of meanings, including the major city in the area (Hartford or Atlanta, which are currently shown on the Service), the Member's own city or town (such as Fairfield, Conn.), and the wider region. In Hartford, respondents expressed interest in weather and events to attend in the state (New Haven, New Britain, etc.), New England (Boston, Springfield, Tanglewood), New York State

(the Catskills), even down to New York City -- whatever is within driving distance. Atlanta respondents similarly said they were interested in the seven metropolitan counties, the state of Georgia, as well as the city itself. Atlanta respondents did not talk as much about their region as Hartford Members did, which suggests that "local content" can have different meanings; this is not to say, however, that they would not be interested in regional events.

The local information the Founding Members would like to see on the Service is of several types (not necessarily in this order):

- Weather. Several respondents mentioned liking the weather maps and information about the local area. One suggested that a three-day forecast should be available. In Atlanta, some respondents were not interested in having weather reports for the entire Southeast down to Florida; this is a broader area than needed.
- Things to do: what events are taking place, a calendar which allows people to plan far enough in advance (two months was mentioned). This includes

sports, entertainment and cultural events (concerts, festivals, museum exhibits, movie schedules, plays) both locally and in the broader region.

- Ticketing for events. This idea was brought up by respondents in some cases, and elicited strong enthusiasm. If tickets could be purchased through the Service, this would save a great deal of time vs. travelling to stand on line, or even trying to get through to ticket sales by phone. One respondent suggested that the Service show seating arrangements, such as a picture of a stadium. As we have seen before, transactional services stimulate a great deal of interest.
- Information about local stores' sales. This would help make Members feel they are getting bargains because they are on the Service.
- Local restaurant reviews and information. Respondents in Hartford were asked if they would want to see this, and several expressed interest.

News about the local area seems to be of less interest. One Member did mention liking the fact that the Service shows "stuff not in the paper" about local people, and a few respondents said they find the headlines helpful, but the general feeling seemed to be that the newspaper would still be relied upon for this kind of information. An Atlanta respondent criticized the Service for inaccuracies in its Georgia news reports. When respondents in one session were asked if they wanted to see news about high school sports, none seemed to care. This is not to say that news should not be provided, but rather that the emphasis might be on practical, how to/what to do information. We recommend that this issue be studied further.

Several comments were made about advertisements on the Service. In general, the Members accepted the idea that the ads are the reason why the PRODIGY Service will be priced moderately compared to other videotex services. Nevertheless, a few said they find it irritating that there are so many ads, one per screen, if for no other reason than that this slows down the entire Service; one respondent asked if it weren't possible to have an ad every third or fourth screen. It is frustrating, another respondent said, that ads like Allstate give the user someone to call, rather than

having everything done on-line. One woman said she had interested a friend in advertising on the Service but had not been able to obtain information about how to go about this; she seemed surprised that the Service would make it so difficult. Another respondent said he "objects to ads disguised as the Service"; Showtime schedule information turned out only to be a long ad for the cable channel.

Only a few respondents were aware of commercial mail at the end of May concerning Father's Day shopping. Most tended to dismiss these messages as ads, another form of "junk mail" which is so common today. There was a reluctance to look at these messages, according to some, because it would further slow down the system. A few respondents did look at the messages but did not seem to find them particularly useful, in part because only a few items were offered. For the most part, the Members did not seem to have negative feelings about such commercial messages on the Service, although one said he had been "turned off."

The idea of targeted messages in the future met with some interest. (The example given was of a bicycle ad directed to people interested in bikes.)

Membership Support Services was highly praised for its helpful attitudes but not always for its knowledgeability. On the positive side, respondents who have called MSS (this is far more common than using messaging) were generally very enthusiastic about the personnel's efforts to solve their problems, and their willingness to pursue answers. Some Members, in fact, saw MSS as extraordinary today, virtually a model for the way customer services should be. On the other side, however, some respondents (including those who were favorable overall) felt that the representatives did not always know as much as they should about the system; a few Members complained they had been given incorrect information. Further, the representatives do not seem to ascertain the Member's level of computer literacy; as a result, they may talk in overly simple terms to the user, who becomes frustrated.

Getting other household members to be interested in the PRODIGY Service is difficult, several respondents said. (This issue was not probed as extensively here as in previous research.) "Right now, I have nothing to sell," one Member explained. The system is too complicated for the average person, and needs to be more responsive to interest his wife. The speed and lack of convenience, as mentioned earlier, seem

to be obstacles for both spouses and children. It is not only family members without a high degree of computer sophistication who are not becoming involved, however; one woman said her husband won't use the Service because he believes computers are meant for "serious purposes."

The security issue, which came up briefly in connection with logging on and use of credit cards, was also mentioned by one respondent who expressed concern about what is "put on and off my hard disk." Security, however, does not seem to be a major issue at this point.

III. SUMMARY AND IMPLICATIONS

This qualitative research study among Founding Members of the PRODIGY Service, who were screened to be less than fully satisfied with the speed of the system (less than 5 on a 7 point scale), provides a number of insights into the issue of speed, and to users' reactions in other areas as well. Overall, the tone of complaints seemed somewhat less intense than it had been in previous studies, and some users said they were enjoying the Service. Nevertheless, there appear to be a number of problems, including quite serious ones, which need to be addressed.

Looking first at the speed issue, which was central to this study, the basic problem seems to be that users have to slow down and wait for the Service a good deal of the time; they move at a faster pace than it does. This is true, respondents said, whether they compare the PRODIGY Service to the computer systems they use at work, other videotex services and bulletin boards, print media, or even television news. A primary cause seen for the speed problem is the small amount of text per screen, due to the large amount of graphics (for borders, pictures, and ads), and the use of graphics mode characters. Respondents wanted an 80 x 20 screen, regular typeface, and the option to switch to a text

mode. The frequent use of the "Working" icon and the wait to see the graphics painted on the screen are particularly annoying. Logging on and off are seen as requiring too many steps; some want one-button log-on. Other suggestions were that the system have a buffer so that users can be entering a command while it is working; that it be possible to scroll down to get to the desired place; that the Service add a downloading feature so that users to print out while users are doing something else.

In terms of content, several areas received some positive comments although Members had a number of suggestions for improvement: stock market information, which is highly important to users who invest; weather; shopping, which has many problems now but can potentially be a convenience; "Ask the Experts," which some Members find helpful and enjoyable; the contest, which stimulates some Members to use the system. Respondents' requests for improvement which will be discussed below.

Messaging through the Service is viewed as a feature which could be very attractive. It is highly limited at present, though, by the difficulties of finding out names of other members in one's local area (because word search is not

available), the inability to print out a complete list, and problems in getting oneself listed. Messages also only appear the first time they are entered in the mailbox, which means it is easy to overlook them.

A basic issue concerning the content raised by some respondents (as it has been in previous research as well) is whether or not the PRODIGY Service offers anything unique to users beyond other media currently available. While the experts might be seen as one unique feature, most respondents were not greatly excited by it; shopping, a special function, has too many drawbacks at present. It may be that the total package of information, entertainment, and, in the future, transactional services, is unique, but users feel that they can get all or most of these features elsewhere more quickly and easily. This critical issue, we believe, must be studied closely in the future.

The graphics receive mixed reactions from users. While they add to the Service's visual interest for some, and are useful in certain areas such as weather maps, they are felt to take too much space, reducing the amount of information on the screen, to lack detail and resolution, and at times to be unnecessary.

The depth of the Service was strongly criticized. While headlines in news are acceptable to some, the general feeling was that depth is lacking in virtually every area: in stocks, there is a need for historical data, other exchanges, and more mutual funds; more detail is needed in weather maps; the shopping lacks variety; games are too simplistic; soap opera digests are too brief; book listings should show descriptions and reviews; sports news and opinions are too skimpy; experts' columns and answers, in some cases, are much too short. Consumer Reports, which has a great deal of potential value, was a major disappointment because only a few products and incomplete articles (minus frequency of repairs) are shown.

There were a number of requests for a data base with a word search capacity. The depth and speed problems are interrelated and both would be improved, users feel, by showing more text (not just a sentence or two) on a screen; more Next's would add to the amount of information, but it is annoying to have to go through so many screens to get a full story or item.

There seem to be fewer complaints about navigation and using the system than there were, reflecting some changes made.

One specific improvement noted is the addition of the directory.

Criticisms, however, remain strong about the use of the system. A major problem, mentioned by a number of respondents, is being bumped off the system and having to re-boot it. Other specific points brought up include: there is no tree available to show users where they are and how they can get to where they want to be; there is no word search capability, considerably slowing down use; often several steps are needed where the user feels that one should do (for instance, having to hit Tab and then Enter); it is necessary to go through screen after screen rather than being able to cursor down or to jump to the place desired; the Undo and Zip keys do not work properly; if the user looks at an ad, he/she loses the place and cannot get back to the screen where it was first seen, discouraging reading of ads; the buildings are confusing and cumbersome.

There were a number of requests for the ability to print out information. This is especially important to people following the stock market (who made a point of asking for print outs to be dated for their files), and information like

Consumer Reports which now has to be copied by hand, something which should be outmoded on a computer.

Shopping, which a number of respondents had looked forward to and thought that other household members would use, has been a major disappointment. Currently, it is seen as not being any more convenient than, or even equally convenient to, in-store and direct order shopping. Prices are high, offering no bargains; the variety of vendors and products is quite limited; there is not enough information or good enough graphics to help users make a buying decision; delivery is slow; the user must get a separate catalog and, in some cases, is required to pay for it; the ordering process is overly complicated. A number of Members had expected that entire catalogs would be on the Service, allowing them to order any item by number completely on-line (without reference to the catalog). Florsheim was mentioned by a number of men as an example of where they should be able just to enter the number of the style they have been buying. The fact that Sears does not take orders late in the evening also led to the misperception that this is true for other vendors.

The biggest improvements needed in shopping, we believe, are more attractive pricing (including special sales and discounts for Members), greater speed in the system overall, the ability to order any item in a catalog, and giving users the option to have their credit card numbers on file. These changes would considerably add to the Service's convenience and appeal, giving Members and spouses a reason to shop on the system.

While this study did not probe other features which will be added in the future, it seems clear that interest in transactional services is strong. These would make the Service useful, not just interesting or fun. Respondents specifically mentioned grocery shopping (although a number of questions arise concerning pricing, variety of selection, and delivery), banking, airline reservations and local ticketing.

Interest in local content extends beyond the major cities (Atlanta, Hartford) to the state and, in some cases, the region within driving distance. Local weather was generally seen as helpful, but some respondents wanted it to be improved to include three-day forecasts and greater detail; Atlanta residents wanted to see the seven metro counties or state, not the entire Southeast region.

Members are especially interested in specific sports, entertainment and cultural events they might attend in the city, state and region. A two-month calendar of events was suggested. Additionally, restaurant, movie guide, and store sales information would be useful. Such information, we believe, would make the PRODIGY Service seem far more valuable and even unique, stimulating use of the system.

Advertising seems to be accepted in principal as making the Service moderately priced, but most Members felt the amount of ads severely reduces the amount of information they obtain. The logistics of looking at ads, as mentioned, can also discourage users from exploring them, which defeats their purpose.

The commercial mail shopping tips around Father's Day seem generally to have been ignored or overlooked as "junk mail." There appears to have been relatively little resentment of them coming up in the mailbox, although a few negative comments were made in the sessions about ads which pretend to be service. The idea of targeted messages was seen as having potential.

Membership Support Services was praised for its extraordinarily helpful attitude. There seems to be a need for improvement, however, in some cases, in representatives' knowledgeability and in their ascertaining the user's level of computer literacy.

Summing up, there is evidence that the PRODIGY Service has made some improvements in the use of the system but that serious problems remain. Speed, lack of depth, certain procedures, limitations on the shopping service and other problems continue to be important obstacles to the use and enjoyment of the Service.

We strongly recommend, therefore, that the suggestions made by Founding Members outlined above be given serious consideration. In particular, the need for improvement seems strongest in the areas of speed, depth, shopping convenience, and printing out. If feasible, adding a data base (at least in key areas such as Consumer Reports) and a word search capability might greatly add to the Service's appeal.

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